

June 9, 2003
Mr. Patrick VanBuskirk
Indianapolis Power and Light Co., Arlington Service Center
3600 N. Arlington
Indianapolis, Indiana 46218 - 1807

Dear Mr. VanBuskirk

Re: Exempt Construction and Operation Status,
097-17278-00502

The application from Indianapolis Power and Light Co., Arlington Service Center, received on May 08, 2003, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-1.1-3, it has been determined that the following emergency generator, to be located at 3600 N. Arlington, Indianapolis, Indiana 46218, is classified as exempt from air pollution permit requirements:

- (a) One (1) diesel powered emergency generator identified as 1, with a maximum capacity of 325 hp and exhausting at one(1) stack, identified as 1.

The following conditions shall be applicable:

- (1) Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following:
 - (a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
 - (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

This exemption is the first air approval issued to this source. The source may operate according to 326 IAC 2-1.1-3.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and City of Indianapolis Office of Environmental Services (OES) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source. If you have any questions, please feel free to contact Keshav Reddy at 327-2221 or kreddy@indygov.org.

Sincerely,

Original Signed by John B. Chavez
Originally signed by
John B. Chavez, Administrator

kr
cc: file (2 copies)
Mindy Hahn, IDEM

**Indiana Department of Environmental Management
Office of Air Quality
and
City of Indianapolis Office of Environmental Services**

**Technical Support Document (TSD) for a New Source Construction and an
Exemption**

Source Background and Description

Source Name: Indianapolis Power and Light Co., Arlington Service Center
Source Location: 3600 N. Arlington, Indianapolis, IN 46218 - 1807
County: Marion
SIC Code: 4813
Operation Permit No.: 097-17278-00502
Permit Reviewer: Keshav Reddy

The Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and City of Indianapolis Office of Environmental Services (OES) have reviewed an application from Indianapolis Power and Light Co., Arlington Service Center relating to the construction and operation of one diesel powered emergency generator.

New Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (a) One (1) diesel powered emergency generator identified as 1, with a maximum capacity of 325 hp and exhausting at one(1) stack, identified as 1.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
1	Emergency Generator	7 3/4	0.33	1811	890

Recommendation

The staff recommends to the Administrator that the operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on May 08, 2003.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (2 Pages).

Potential To Emit of Source Before Controls

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency.”

Pollutant	Potential To Emit (tons/year)
PM	0.18
PM-10	0.18
SO ₂	0.17
VOC	0.2
CO	0.54
NO _x	2.52

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of pollutants are less than 100 tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-6.1.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of pollutants are less than 25 tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-5.5.
- (c) The potential to emit (as defined in 326 IAC 2-7-1(29)) of pollutants are less than the levels listed in 326 IAC 2-1.1-3(d)(1). Therefore, the source is subject to the provisions of 326 IAC 2-1.1-3.
- (d) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

County Attainment Status

The source is located in Marion County.

Pollutant	Status
PM-10	Unclassifiable
SO ₂	Maintenance Attainment
NO ₂	Attainment
Ozone	Maintenance Attainment
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Marion County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) Marion County has been classified as attainment or unclassifiable for pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Source Status

New Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	0.18
PM10	0.18
SO ₂	0.17
VOC	0.2
CO	0.54
NO _x	2.52

- (a) This new source is not a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This new source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons/year.

This is the first air approval issued to this source.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 1-6-3 (Preventive Maintenance Plan)

Only sources required to obtain a permit are required to prepare and maintain a Preventive Maintenance Plan (PMP). The potential to emit regulated air pollutants is below any minimum permitting threshold or permitting provisions found in 326 IAC 2-1.1-2 (Permit Review Rules: General Provisions; Applicability) and or 326 IAC 2-5.1 (Construction of New Sources).

Therefore, this source is not subject to 326 IAC 1-6-3.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants)

This source is not subject to 326 IAC 2-4.1, because it is not a major source of hazardous air pollutants, as defined in 40 CFR 63.

326 IAC 2-6 (Emission Reporting)

This source is not subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit less than ten (10) tons per year of NO_x and/or VOC in Marion County and less than one hundred (100) tons per year of Particulate Matter (PM). In addition, the potential to emit HAPs is less than any major source threshold and, as such, is not required to obtain a permit under 326 IAC 2-7 (Part 70 Permit Program). As a result, 326 IAC 2-6 (Emission Reporting) does not apply.

326 IAC 5-1 (Opacity)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

326 IAC 6-1(Nonattainment Area Limitations)

This rule does not apply to this source because the potential to emit of particulate is less than one hundred (100) tons per year and it is not a specifically listed source in 326 IAC 6.

326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating)

Emissions unit 05 is not a source of indirect heating. Therefore, 326 IAC 6-2-4 does not apply.

State Rule Applicability - Individual Facilities

326 IAC 6-3 (Process Operations)

Pursuant to 326 IAC 1-2-59, process weight does not include liquid or gaseous fuels, therefore 326 IAC 6-3-2 does not apply to these units.

326 IAC 7.1 (Sulfur Dioxide Emission Limitations)

IPL Arlington Service Center's potential to emit SO₂ is less than 25 tons per year, therefore 326 IAC 7.1 (Sulfur Dioxide Emission Limitations) does not apply.

Conclusion

The construction and operation of this diesel powered emergency generator shall be subject to the conditions of the attached proposed New Source Construction and Exemption **097-17278-00502**.

Appendix A: Emission Calculations
Internal Combustion Engines - Diesel Fuel
Emergency Generator (>250 and <600 HP)

Page 1 of 2 Appendix A of TSD

Company Name : Indianapolis Power and Light Co., Arlington Service Center
Street Address : 3600 N. Arlington, Indianapolis, IN 46218
County : Marion
Exemption No. : 097-17278-00502
Reviewer : Keshav Reddy

Emissions calculated based on output rating (hp)

Power Output Potential Throughput

1 generator @325 HP

Horsepower (hp)	hp-hr/yr
325	162500

Emission Factor in lb/hp-hr	Pollutant					
	PM 0.0022	PM-10 0.0022	Sox 0.00205	Nox 0.031	VOC 0.00247	CO 0.00668
Potential Emission in tons/yr	0.18	0.18	0.17	2.52	0.20	0.54

NOx emission factor: uncontrolled = 0.024 lb/hp-hr

Methodology

Potential Throughput (hp-hr/yr) = hp * 500 hr/yr

Emission Factors are from AP 42 (Supplement B 10/96) Table 3.3-1.

Emission (tons/yr) = [Potential Throughput (hp-hr/yr) x Emission Factor (lb/hp-hr)] / (2,000 lb/ton)

PTE was calculated using 500 hours per year for emergency generator.

Appendix A: Summary of Potential to Emit

Page 2 of 2 Appendix A of TSD

Company Name : Indianapolis Power and Light Co., Arlington Service Center**Street Address :** 3600 N. Arlington, Indianapolis, IN 46218**County :** Marion**Operation Permit No. :** 097-17278-00502**Reviewer :** Keshav Reddy**Uncontrolled Emissions (tons/year)**

Process	Pollutants					
	PM	PM-10	SO ₂	NO _X	VOC	CO
Diesel Fuel Engine	0.18	0.18	0.17	2.52	0.2	0.54
Total Uncontrolled Emissions (tons/year)	0.18	0.18	0.17	2.52	0.2	0.54